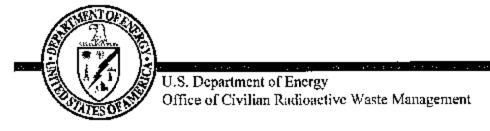ENCLOSURE 7

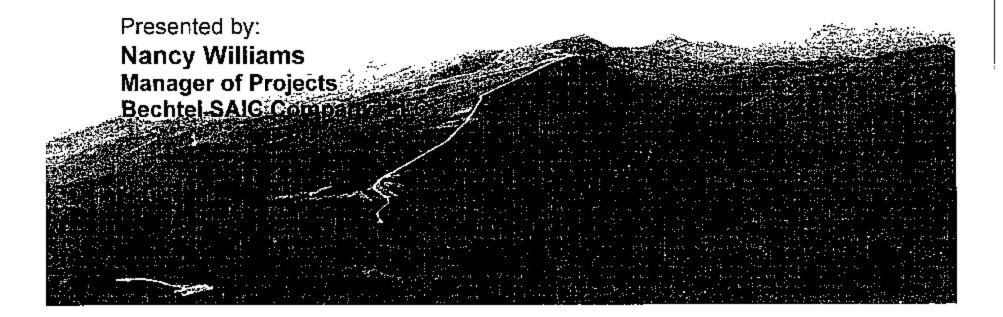# Status of Model Validation and Software Corrective Action Reports, CARs 1 and 2

Presented to:
DOE/NRC Quarterly Quality Assurance Meeting

Presented by:
Nancy Williams
Manager of Projects
Bechtel SAIC Company

Model Validation Corrective Action Report
BSC-01-C-001

- ## Status

  - Complete amended response accepted by Office of Quality Assurance (OQA) on May 1, 2002

  - New Analysis and Model procedures were developed (AP-SIII.9Q and AP-SIII.10Q) and were effective on December 21, 2001

  - Self-assessments will be conducted by the Chief Science Office during the development and validation of the License Application model as an on-going effort

  - _____ of corrective actions completed and verified

Software Corrective Action Report
BSC-01-C-002

- **Status**

  - Complete amended response accepted by DOE OQA on June 11, 2002

  - Procedures are drafted and being coordinated within BSC. Will be effective on October 1, 2002

  - BSC self-assessment on software stand-down exemption process completed

  - BSC Quality Assurance will conduct surveillance of baselined software by September 30, 2002

  - _____ of corrective actions completed and verified

Software Corrective Action Report
BSC-01-C-002
(Continued)

- ## Software stand-down exemption process
  - Software stand-down exemption process placed to allow continued software development while detailed corrective actions were being developed

- ## Self-assessment on exemption process
  - Purpose
    - Evaluate the implementation of the stand-down exemption process by each organization involved in the software development process
  - Scope
    - The self-assessment evaluated a sample (15) of the 53 codes being developed under exemption from stand-down
    - Qualification documents for 4 codes include in the sample were evaluated

Software Corrective Action Report
BSC-01-C-002

(Continued)

- Findings

    - No conditions adverse to quality associated with software development were identified

    - AP-SI.1Q, *Software Management*, is being followed and responsible managers are providing additional management oversight

    - Lessons Learned generated to address management of the exemption process

Software Corrective Action Report
BSC-01-C-002

(Continued)

- **Status on requirements to lift the software stand-down**

  - **Root cause evaluation (completed)**

  - **Requires implementation of actions to preclude recurrence**

    - **Establish clear accountability for procedural compliance (8/1/02)**

    - **Revised/new procedures will be issued by August 30, 2002**

    - **Training to new procedures (9/1/02-9/30/02)**

    - **Will be effective October 1, 2002)**

  - **Software configuration management tool operational by October 1, 2002**

YUCCA MOUNTAIN PROJECT

Software Corrective Action Report
BSC-01-C-002
(Continued)

- **BSC QA surveillance - additional assurance of baselined software integrity**

  - **Purpose:**

    - Surveillance will be performed on a sample of the baselined software to independently verify software functionality

  - **Status**

    - Prepare the surveillance plan and complete surveillance by September 30, 2002